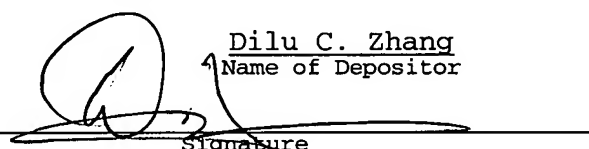IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s):   Shao et al.

Title: SELECTING MULTIPLE PATHS IN OVERLAY NETWORKS FOR
STREAMING DATA

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INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
PO Box 1450
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Pursuant to 37 C.F.R. §1.56(a), Applicant hereby cites the
following documents (copies enclosed) listed on the attached copy
of Form PTO-1449.

This Information Disclosure Statement is filed in accordance with the paragraph of 37 CFR §1.97 checked below:

  X   1.97(b)   This Information Disclosure Statement is filed:

          (1)   Within three months of the filing date of a national application; OR

          (2)   Within three months of the date of entry of the national stage of an international application; OR

          (3)   Before the mailing of a first Office Action on the merits.

     No fee or certification is required.

  ___ 1.97(c)   This Information Disclosure Statement is filed after the period specified in paragraph (b) above, but before the mailing date of either:

          (1)   A Final Action under 37 CFR 1.113; OR

          (2)   A Notice of Allowance under 37 CFR 1.311;

AND is accompanied by either:
(check one)

_____ the Certification under 37 CFR
1.97(e) as set out below; OR

_____ the fee of $240.00 under 37 CFR
1.17(p).

__ 1.97(d)   This Information Disclosure Statement is filed
after the mailing date of either:

(1)   a Final action under 37 CFR 1.113; OR

(2)   A Notice of Allowance under 37 CFR 1.311;

BUT before payment of the Issue Fee, AND is accompanied
by:

(1)   the Certification under 37 CFR 1.97(e) as
set out below; AND

(2)   Petition is hereby made under 37 CFR
1.97(d) for consideration of this
Information Disclosure Statement; AND,

(3)   Authorization to charge the petition fee
of $130.00 as set out in 37 CFR 1.17(i).

If this Information Disclosure Statement is being filed
under 37 CFR 1.97(c) or 1.97(d), the undersigned Attorney hereby

certifies that:

    __ each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing date of this Statement;

or

    __ no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, or to the knowledge of the undersigned Attorney after making reasonable enquiry, was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing date of this Statement.
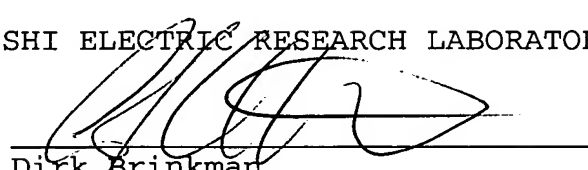
Authorization is hereby given to charge the indicated fee(s) to Deposit Account No. 50-0749.

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Respectfully submitted,

MITSUBISHI ELECTRIC RESEARCH LABORATORIES

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Enclosures

Form PTO-1449 (modified 2/91)	U.S. DEPT OF COMMERCE Patent and Trademark Office	Attorney Docket Number: MERL-1502	Serial Number:
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)		Applicant: Shao et al.	
		Filing date: Herewith	Group art area:

U.S. PATENT DOCUMENTS

Exam- iner Initial	Patent number	Date	Name	Class	Subclass	Filing date if appropriate

FOREIGN PATENT DOCUMENTS

	Document number	Date	Country	Class	Subclass	Translation	
						YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

1.	D. G. Andersen, H. Balakrishnam, M.F. Kaashoek, and R. Morris, "Resilient overlay networks," in 18th ACM *Symposium on Operation Systems Principles*, 2001.
2.	John Apostolopoulos,Tina Wong, Wai-tian Tan, Susie Wee, "On multiple description streaming with content delivery networks," *IEEE INFOCOM,* 2002.
3.	Ali C. Begen, Yucel Altunbasak, and Ozlem Ergun, "Fast Heuristics for multi-path selection for multiple description encoded video streaming," in *IEEE ICME*, 2003.
4.	Ali C. Begen, Yucel Altunbasak, and Ozlem Ergun, "Multi-path selection for multiple description encoded video streaming," in *IEEE ICC,*2003.
5.	Jian Zhou, Huai-Rong Shao, Chia Shen, Ming-Ting Sun, "Multi-path transport of FGS video," *Packet Video Workshop*, 2003.
6.	S. Lin, Y. Wang, S. Mao, and S. S. Panwar, " Video Transport over Ad Hoc Networks with Path Diversity," Proceedings of The 2002 IEEE International Symposium on Circuit and Systems, Scottdale, Arizona, May 26-29, 2002.
7.	J.G. Apostolopoulos, "Reliable video communication over lossy packet networks using multiple state encoding and path diversity," in *VCIP,*2001.
8.	Shigang Chen, Klara Nahrstedt, "On finding multi-constrained paths," in *IEEE ICC*, 1998.
9.	Venkata N. Padmanabhan, Helen J. Wang, Philip A. Chou, "Resilient peer-to-peer streaming," Technical Report MSR-TR-2003-11, Microsoft Research, Redmond, WA, March, 2003.
10.	Srihari Nelakuditi and Zhi-Li Zhang, "On selection of paths for multipath routing," *IEEE IWQoS*, 2001.
11.	Gang Liu, K.G. Ramakrishnan, "A*Prune: An algorithm for finding K shortest paths subject to multiple constraints," *IEEE INFOCOMM*,

	2001.
12.	Thinh Nguyen and Avideh Zakhor, "Path diversity with forward error correction system for packet switched networks," *IEEE INFOCOM*, 2003.
13.	Zheng Wang and Jon Crowcroft, "Quality of service routing for supporting multimedia applications," *IEEE Journal of Selected Areas in Communications*, page 1228-1234, Vol 14, No. 7, 1996.
14.	E. W. Zegura, K.L. Calvert and M. J. Donahoo, "A quantitative comparison of graph-based models for Internet topology," IEEE/ACM Trans. Networking, vol. 5, no. 6, pp. 770-783, 1997.
Examiner:	Date Considered:

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